

String circuit-breaker, DC current, 2p, 12A

Part no. **PKZ-SOL12**
120937
 EL Number **4300316**
 (Norway)

| General specifications | |
|---|--|
| Product name | Eaton Moeller® series PKZ-SOL String circuit-breaker |
| Part no. | PKZ-SOL12 |
| EAN | 4015081187676 |
| Product Length/Depth | 93 millimetre |
| Product height | 76 millimetre |
| Product width | 58 millimetre |
| Product weight | 0.308 kilogram |
| Compliances | Contact Manufacturer |
| Certifications | EN 60947-2 IEC 60947-2 TÜV-certified IEC/EN 60947-2 |
| Product Tradename | PKZ-SOL |
| Product Type | String circuit-breaker |
| Product Sub Type | None |
| Features & Functions | |
| Actuator type | Turn button |
| Design | Open |
| Features | Complete device with protection unit |
| Number of poles | Two-pole |
| General information | |
| Application | Open areas Utility buildings |
| Degree of protection | IP20 |
| Mounting Method | DIN rail (top hat rail) mounting optional Top-hat rail fixing (according to IEC/EN 60715, 35 mm) |
| Overload release current setting - min | 8 A |
| Overload release current setting - max | 12 A |
| Product category | String circuit-breakers Switchgear for photovoltaic systems |
| Protection class | 2 |
| Suitable for | DIN rail (top hat rail) mounting |
| Climatic environmental conditions | |
| Ambient operating temperature - min | -25 °C |
| Ambient operating temperature - max | 60 °C |
| Climatic proofing | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |
| Terminal capacities | |
| Terminal capacity (flexible with ferrule) | 2 x (1 - 6) mm ² , ferrule to DIN 46228 1 x (1 - 6) mm ² , ferrule to DIN 46228 |
| Terminal capacity (solid/stranded AWG) | 18 - 14 |
| Electrical rating | |
| Internal resistance | 31 mΩ |
| Rated operational current (Ie) | 12 A at AC-21A |
| Rated operational voltage (Ue) - min | 900 V |
| Rated operational voltage (Ue) - max | 900 V |
| Rated uninterrupted current (Iu) | 12 A |
| Short-circuit current | 5 - 9 A, Ics, Admissible short-circuit current for solar modules |
| Short-circuit release | 6 x Ie, Electromagnetic trip block |

| Contacts | | |
|--|--|--|
| Number of auxiliary contacts (change-over contacts) | | 0 |
| Number of auxiliary contacts (normally closed contacts) | | 0 |
| Number of auxiliary contacts (normally open contacts) | | 0 |
| Design verification | | |
| Equipment heat dissipation, current-dependent Pvid | | 4.5 W |
| Heat dissipation capacity Pdis | | 0 W |
| Heat dissipation per pole, current-dependent Pvid | | 1.5 W |
| Rated operational current for specified heat dissipation (In) | | 12 A |
| Static heat dissipation, non-current-dependent Pvs | | 0 W |
| 10.2.2 Corrosion resistance | | Meets the product standard's requirements. |
| 10.2.3.1 Verification of thermal stability of enclosures | | Meets the product standard's requirements. |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat | | Meets the product standard's requirements. |
| 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects | | Meets the product standard's requirements. |
| 10.2.4 Resistance to ultra-violet (UV) radiation | | Meets the product standard's requirements. |
| 10.2.5 Lifting | | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.6 Mechanical impact | | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.7 Inscriptions | | Meets the product standard's requirements. |
| 10.3 Degree of protection of assemblies | | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.4 Clearances and creepage distances | | Meets the product standard's requirements. |
| 10.5 Protection against electric shock | | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.6 Incorporation of switching devices and components | | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.7 Internal electrical circuits and connections | | Is the panel builder's responsibility. |
| 10.8 Connections for external conductors | | Is the panel builder's responsibility. |
| 10.9.2 Power-frequency electric strength | | Is the panel builder's responsibility. |
| 10.9.3 Impulse withstand voltage | | Is the panel builder's responsibility. |
| 10.9.4 Testing of enclosures made of insulating material | | Is the panel builder's responsibility. |
| 10.10 Temperature rise | | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 Short-circuit rating | | Is the panel builder's responsibility. The specifications for the switchgear must be observed. |
| 10.12 Electromagnetic compatibility | | Is the panel builder's responsibility. The specifications for the switchgear must be observed. |
| 10.13 Mechanical function | | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |

Technical data ETIM 9.0

| Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228) | | |
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| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss13-27-37-04-09 [AJZ716018]) | | |
| Rated permanent current Iu | A | 12 |
| Rated voltage | V | 900 - 900 |
| Rated short-circuit breaking capacity Icu at 400 V, 50 Hz | kA | 0 |
| Overload release current setting | A | 8 - 12 |
| Adjustment range short-term delayed short-circuit release | A | 0 - 0 |
| Adjustment range undelayed short-circuit release | A | 72 - 72 |
| Power loss | W | 4.5 |
| Device construction | | Built-in device fixed built-in technique |
| Integrated earth fault protection | | No |
| Type of electrical connection of main circuit | | Screw connection |
| Suitable for DIN rail (top hat rail) mounting | | Yes |
| DIN rail (top hat rail) mounting optional | | Yes |
| Number of auxiliary contacts as normally closed contact | | 0 |
| Number of auxiliary contacts as normally open contact | | 0 |
| Number of auxiliary contacts as change-over contact | | 0 |
| With switched-off indicator | | No |
| With integrated under voltage release | | No |

| | | | |
|---|--|--|-------------|
| Number of poles | | | 2 |
| Position of connection for main current circuit | | | Other |
| Type of control element | | | Turn button |
| Complete device with protection unit | | | Yes |
| Motor drive integrated | | | No |
| Motor drive optional | | | No |
| Degree of protection (IP) | | | IP20 |